

# FAA Operational Facility Workstation Questions and Answers

## **Question 1: SOW, Applicable Documents:**

**Is the FAA going to use ISO Certification as a requirement in order to respond to a solicitation?**

No. ISO Certification is a discriminator, not a requirement. Certification is not required for consideration in this procurement. The FAA anticipates evaluating proposals where one of the evaluation factors rates the proposed vendor's ability to produce a quality product on time and in compliance with the stated requirements. ISO 9000 certification is one of many possible means of communicating to the FAA the proposed vendor's abilities in this regard. The "minimum requirements" text will be removed in the SOW.

## **Question 2: SOW, C.3.1:**

**(a) Vendors will require clarification on what is to be disassembled and disposed of, loading dock accessibility and conditions, and whether or not a staging or tear down area is available.**

Agreed. Further clarification of site specific requirements, to include loading dock conditions, staging areas, seismic bracing, etc. will be provided with each Delivery Order.

It is intended for proposals to the resulting solicitation to contain fixed prices for the workstations only. Additional costs inherent to satisfying the SOW (delivery, installation, seismic bracing) are unique to each site and shall be quoted and agreed upon in the individual Delivery Order and authorized under a separate contract line item.

**(b) Please clarify the definition of non-peak hours. This information affects overtime, and other resource variables.**

Non-peak hours will be defined on a site-specific basis. Each operational environment intended for these workstations has its own operational pace and will require installation at a different time.

## **Question 3: Specifications 4.3&4.4:**

**Shipping and installation quotes are based on final destination, and therefore detail is required from the FAA in order to provide accurate shipping quotes within in the bid context. Information such as; final destination, location (urban vs. rural), loading and unloading logistics is required to provide accurate estimates. This information is required for each center.**

See the answer to question 2(a) above.

**Question 4: Specification 4.5:**

**A seismic bracing quote requires provision of any and all building drawings showing sub floor structures such as; HVAC duct work, data cabling channels, electrical conduit, raised flooring pedestals, and other sub floor structures or obstructions.**

See the answer to question 2(a) above.

**Question 5: Specification 1.4**

**The "Workstation and Workplace Ergonomics at Federal Aviation Operations Control Centers: Phase 1 - Evaluation of Ergonomic Issue" states that "...ambient noise shall not exceed 55 dBA..." Please elaborate on the requirement for 45 dBA.**

Specification 1.4 has been changed to reflect 55 dBA.

**Question 6: Specification 1.5**

**Re-locating workstations without disassembly is not a practical requirement due the weight and rigidity of the workstations, unless the workstations were designed as modular units on castors. To do so could easily cause misalignment of the workstation columns and work surfaces and could pose a safety hazard to those moving the workstations.**

The FAA requires a workstation that does not require disassembly of its keyboard/monitor support structure. The FAA frequently requires relocation of workstations. Those workstations requiring disassembly of its support structure have shown to:

- Be structurally less stable than uni-frame construction;
- Require costly disassembly/assembly costs;
- Require costly training and special tooling.

It is recognized that the privacy panel system may need to be removed for relocation of the workstation. However, workstations designed for disassembly of their keyboard/monitor surface support structures will not be acceptable.. Additionally, designs of modular units on castors are not acceptable. Specification 1.5 has been modified to more accurately reflect this need.

**Question 7: Specification 1.8**

**Based on information in the other requirements, we find this to be impossible.**

Market analysis has indicated to the FAA that the workstation industry has the ability to meet these requirements.

**Question 8: Specification 1.10**

**Spacing of the columns is layout dependant, based on the overall size of the workstation**

Agreed. Column spacing may be variable; however, the FAA requires a minimum amount of space below the work surfaces in order to accommodate its Technical Operations workforce. Following anthropometric studies and evaluations of current employees, the dimensions underneath the working surfaces of 40"W x 21"D were established as a reasonable accommodation for the current and future workforce needs. Specification 1.10 has been modified to more accurately reflect this need.

**Question 9: Specification 1.12**

**The requested edge nosing is not an ergonomic solution.**

HFDS Section 12.5.1.4 states that exposed edges shall be rounded. Rounded edges help prevent pressure points that lead to carpal tunnel syndrome when employees rest their wrists/arms on the workstation. This has been a serious problem with the present workstations therefore the FAA's minimum ergonomic solution is identified in the revised Specification 1.12.

**Question 10: Specification 1.14**

**The final layout of the workstation will ultimately determine the equipment that can be accommodated on the workstation.**

Due to operational work loads, the minimum requirements identified in Specification 1.14 will not be changed.

**Question 11: Specification 1.27**

**Will slide out shelves of 16 gauge metal be acceptable if other framing and structural design measures show it to be capable of meeting the intent of this requirement?**

Yes. The FAA will accept 16 gauge sheet metal as a minimum requirement. Specification 1.27 has been modified to reflect this change.

**Question 12: Specification 1.28**

**Will laminate front and rear access panels be acceptable?**

Yes, in part. The FAA requires access panels that are as durable and dissipate heat at least as well as sheet metal. Laminate materials can be a variety of potential material solutions, any of which may or may not be as durable and dissipate heat as well as sheet metal. Therefore, if offerors wish to propose a material other than sheet metal for rear access panels, they must demonstrate that the solution has equivalent durability and heat dissipation capabilities to be considered acceptable. Specification 1.28 has been modified to reflect this change

**Question 13: Specification 1.32**

**Will bases of 14 gauge metal be acceptable if other framing and structural design measures show it to be capable of meeting the intent of this requirement?**

Yes. The FAA will accept a minimum of 14 gauge cold rolled steel for base components and a minimum of 14 gauge cold rolled sheet metal for base cover components as long as the static load requirements identified in specification 1.2 are met. However, the FAA will not accept aluminum in structural components due to its inherent weakness and the special tooling required for grounding and bonding. Equipment installed on the workstation is to be grounded to the structural components and the FAA is not willing to accommodate the unique requirements of grounding to aluminum components. Specification 1.32 has been modified to reflect this change.

**Question 14: Specification 1.34**

**Will the FAA require vendors to provide additional data on seismic performance capabilities?**

The proposed workstation must be capable of being seismically braced as described in specification 1.34 (as revised). The means of describing this capability is the offeror's prerogative.

**Question 15: Specification 1.37**

**May the front and rear panels of the workstation be hinged?**

Privacy panels shall have pop-out sections. Components other than privacy panels may be hinged. Whether hinged or pop-out, those panels providing access to the front and rear of the workstation for electrical repairs and maintenance must not interfere with the user. Requirement 1.37 has been modified to clarify this need.

**Question 16: Specification 2.3**

**Will a distance of travel for electrically actuated input platform from 24.5" to 46.5" be acceptable?**

Agreed in part. The FAA requires these workstations to accommodate employees performing their duties while seated and while standing on their feet. Paragraph 14.1.2 of the HFDS states that design clearance dimensions must be based upon the 95th percentile of the male distribution data and the 5th percentile of the female distribution data. As shown in Appendix B of the HFDS, the 5th percentile knee height for women is 18.4 inches. The FAA recognizes the restrictive nature of requiring the work surface to travel downward to this height and has determined that utilizing the 95th percentile male value for seated knee height of 24.3" (HFDS Appendix B, Section 22) to be a suitable alternative reference standard. The FAA considers the .2" difference between the requested value and the reference standard value as minor. 24.5" will therefore be used in the revised specification. The 95th percentile of the Elbow Rest Height When Standing measured on male workers in the Department of Defense workforce evaluation (DOD-HDBK-743A) is the value used since standing Elbow Rest Height was not measured during the FAA analysis. This represents a height of 47.5 inches. Specification 1.10 has been modified to reflect these minimum requirements.

**Question 17: Specification 2.4**

**Will a distance of travel for the monitor surface from 28" to 45.7" be acceptable?**

The same answer to Question 16 applies.

NOTE: HFDS Section 5.1.2.5 states that a viewing angle of 15 degrees below the horizontal is recommended for both surfaces. That is a natural location for one's viewing angle which leads to less neck strain, especially for bifocal and trifocal users. The monitor surface must therefore have the same range as the input surface in order to accommodate that natural line of sight.

**Question 18: Specification 2.5**

**Will the FAA accept a workstation that must be disassembled prior to moving?**

See the answer to question 6 above.

**Question 19: Specification 3.4**

**Will the FAA accept (2) bidirectional air vents on the work surface that can be easily adjusted to meet operator needs, including high efficiency air filters and can be integrated into the buildings HVAC system?**

Yes, in part. At a minimum, the FAA requires two bidirectional air vents (total) with a minimum of one air vent below the workstation keyboard/input surface for lower body cooling and at least one air vent above the keyboard/input surface for upper body cooling. The FAA does not intend to integrate the workstation unit to the building HVAC system due to the additional design/engineering work associated with this setup. Specification 3.4 has been modified to reflect these minimum requirements

**Question 20: Specification 3.8**

**Is it necessary to have the full workstation assembly UL rated when all components used in the assembly are rated individually?**

Yes. Due to the FAA use of single grounding and the workstation's connection to essential power, the FAA requires UL certification on the entire workstation. The FAA recognizes that UL certification addresses safety issues only and is no way related to the ability to produce a quality workstation.

**Question 21: Specification 3.10**

**Will the FAA accept (2) bidirectional air vents on the work surface that can be easily adjusted to meet operator needs, including high efficiency air filters and can be integrated into the buildings HVAC system?**

No. Specification 3.4 addresses the airflow louver requirements. Specification 3.10 has therefore been changed to address the control component only.

**Question 22: Specification 3.11**

**Will the FAA accept a personal comfort amenity control panel that is work surface mounted, and can control a variety of items, such as lighting, cooling and heat?**

No. FAA workstation dimensional requirements did not take into account the use of surface mounted control panel. Surface mounted control panels would create an obstacle on the work surface when employees need to lay manuals or other work-related items on the work surface. Flush mounted control panels would not cause that obstacle. The requirement shall remain for a flush mounted control panel.

**Question 23: General**

**Will the FAA require a minimum time (in years) of doing business as a requirement for consideration of proposals?**

No. The FAA does not have a minimum business history requirement for this procurement. However, an offeror's past performance is intended to be an evaluated factor in the upcoming solicitation.

**Question 24: General**

**Will the FAA require offerors to be a full manufacturer of product, including all design services, metalwork, woodwork and millwork to ensure product consistency and lead times.**

No. The FAA feels that this requirement would unduly limit competition.

**Question 25: General**

**Will the FAA require offerors to demonstrate Environmental benefits, such as LEEDS points, recycled content and any additional certifications, each as GreenGuard?**

No. Although the FAA recognizes the importance of these initiatives and those like them, this procurement is not specifically taking their inclusion into consideration.